

# PRASHANTH TIRUPACHUR VASANTHAKRISHNAN

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## Education

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**Northwestern University, Evanston, IL**  
Master of Science in Computer Science

Sep '17 - Mar '19  
GPA 3.83/4.0

**Anna University, India**  
Bachelor of Engineering in Electronics and Communication Engineering

June '13 - April '17  
GPA 7.22/10.0

## Technical Skills

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**Languages:** Python, C, C++, Go, Bash, JavaScript, Racket, Java  
**Systems:** Kafka, Pulsar, Raft, Docker, Kubernetes, HELM, Nginx, jconsole, Jenkins, Jaeger  
**Web:** AngularJS, NodeJS, HTML, CSS, Karma, Jasmine, Grunt, REST, Selenium  
**Data:** Tableau, Matplotlib, Pandas, Hadoop, MapReduce, Grafana, InfluxDB, SQL, XML/Json, YAML  
**Other:** CI/CD, Unix, AWS, EKS, GCD, Git, SVN, IoT, Jira, Arduino, PyTest

## Work Experience

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**TIBCO Software Inc., Naperville, IL**  
Senior Software Engineer

Aug '20 - Present

- Distributed systems engineer working on messaging/middleware solutions
- Work on Apache {Pulsar, Kafka} as an internal resource handling customer escalations
- Contributor to various TIBCO supported open-source projects

Software Engineer (Member Technical Staff)

April '19 - Aug '20

- Lead developer for TIBCO's Messaging Manager a predictive, auto-completing smart command-line interface library
- Implemented a configurable multi-threading interface which reduced scripted command execution time by over 45%
- Onboarded three large-scale distributed messaging products to be fully managed by the command-line interface library

Associate Member Technical Staff - Intern

June '18 - Sep '18

- Built a live-time monitoring suite with visualizations for Apache Kafka using Grafana & InfluxDB
- Enhanced TIBCO FTL's Messaging Dashboard by adding smart search with regex which could quickly isolate specific parts of the configuration and reduce the number of data pulls from the realm server with complete test coverage

**Northwestern University, Evanston, IL**

Graduate Student Researcher - AquaLab ([www.aqualab.cs.northwestern.edu](http://www.aqualab.cs.northwestern.edu))  
Advisor - Dr. Fabián E. Bustamante

Sep '17 - Mar '19

- Developed a VPN(QUIC tunnel) to enhance InFlight WiFi experience by reducing packet latency with 0-RTT
- Designed an automated HAR based test bench to measure the performance of QUIC VPN on the top 5000 Alexa sites
- Created a live-time data visualization suite for ScaleUp using Grafana & InfluxDB
- Implemented a router level configurable network emulation infrastructure using OpenWRT & TC-NETEM

Graduate Teaching Assistant - EECS - 111 Fundamentals of Computer Programming

Mar '18 - June '18

**Shall-I, India ([www.shall-i.com](http://www.shall-i.com))**

June '15 - July '17

Co-Founder & Product Head

- Conceptualized a marketplace on iOS and Android for connecting people in need of lifestyle & maintenance services
- Developed feature ideas into detailed specs and collaborated with designer to create mockups

**Seglio, India**

June '15 - July '17

Co-Founder & Lead Developer

- An Android app developed using Android Studio and Parse which facilitates used book exchange
- Led a three-member engineering team and drove product strategy to gain 1000 monthly active users
- Top 10 apps in the city by Apps for Chennai event and was invited for Google's Mobile Developer Conference in 2015

## Projects and Activities

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**Gesticulation based smart surface with enhanced biometric security - Anna University, India**

Sep '16 - Mar '17

- A product that converts any flat surface into a smart gesture recognition system using OpenCV on RaspberryPi
- Awarded the Best Project of the year 2017(out of 120 projects) and a research grant of ₹10000

**Forum for Economic Studies by Engineers (Forese) - Anna University, India**

Jan '14 - April '17

Vice President & Engineering Lead

- Organized Startup weekends and hackathons to cultivate an entrepreneurial culture at the institution

**Students' Research Club - Anna University, India**

Feb '14 - April '17

Co-Founder & Executive Member

- Nested under IEEE Madras Chapter, we tutored over 300 students in Arduino and 3D Printing